

**Notice of Allowability**

Application No.

10/018,413

Examiner

Paul D. Kim

Applicant(s)

RAISANEN, HEIKKI

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/21/2005.
2. ☒ The allowed claim(s) is/are 8-15 and 32.
3. ☒ The drawings filed on 21 June 2005 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Shakir on 8/25/2005.

The application has been amended as follows:

#### **IN THE CLAIM**

Cancelled the non-elect claims 1-7 and 16-31.

**Re. Claim 8:** After the phrase "fitted with" as recited in line 2, replace the phrase "film-like metallic electrodes" to --metallic electrode films--.

After the phrase "at least one of the" as recited in line 3, change the phrase "metallic electrodes" to --metallic electrode films--.

After the phrase "fitted with a" as recited in line 4, change the phrase "film-like dielectric material" to --dielectric film--.

After the phrase "element material," as recited in line 6, change the phrase "the electrodes are" to --at least one of the electrodes is--.

Before the phrase "surface of" as recited in line 7, change the phrase "the" to --a--.

After the phrase "the surface of the" as recited in line 8, change the phrase "film-like dielectric material" to --dielectric film--.

After the phrase “removing the” as recited in line 9, change the phrase “metallic matter” to –metal--.

After the phrase “roll to roll, and” as recited in line 10, change the phrase “in which method” to –wherein--.

Before the phrase “roll to roll a” as recited in line 12, change the phrase “form” to –from--.

After the phrase “roll to roll, and” as recited in line 12, change the phrase “in which at least the metal film from which the electrode made has been provided with” to –wherein at least one of the metallic electrode films comprises--.

**Re. Claim 9:** After the phrase “defined in claim 8,” as recited in line 1, change the phrase “characterized in that the electrode patterns provided in the signal electrode material” to –wherein the electrode patterning provided in the metallic electrode films--.

**Re. Claim 10:** After the phrase “defined in claim 8,” as recited in line 1, change the phrase “characterized in that” to –wherein--.

**Re. Claim 11:** After the phrase “characterized in that the” as recited in line 1, delete the phrase “signal”.

Before the phrase “a band-like sensor element” as recited in line 2, change the phrase “band-like design and in which method” to –band pattern and wherein--.

**Re. Claim 12:** After the phrase “defined in claim 8,” as recited in line 1, change the phrase “characterized in that at least some of the signal electrode patterns” to –wherein at least some of the electrode patterning--.

**Re. Claim 13:** After the phrase “defined in claim 8,” as recited in line 1, change the phrase “characterized in that at least some of the signal electrode patterns” to – wherein at least some of the electrode patterning--.

**Re. Claim 14:** After the phrase “defined in claim 8,” as recited in line 1, change the phrase “characterized in that the metal film from which the electrode is made is” to – wherein the metallic electrode films comprise--.

**Re. Claim 15:** After the phrase “surface of the” as recited in line 2, change the phrase “metal film from which the electrode is made has been printed with” to –metallic electrode films comprise printing with--.

**Insert new claim 32 as follow:**

--32. (new) A method for manufacturing an electromechanical sensor element, the sensor element having an electrode, the method comprising steps of:

(a) fitting a dielectric film to an outer surface of a metallic electrode film;

(b) fitting the metallic electrode film to each surface of a sensor film to produce a sensor element material; and

(c) cutting the sensor element from the sensor element material,

wherein the electrode is created by printing a dielectric pattern corresponding to the electrode onto a surface of a metal on a surface of the dielectric film in a continuous process from roll to roll and removing the metal from the areas outside the pattern by etching in a continuous process from roll to roll,

wherein the dielectric film and patterned metallic electrode film comprise a combination, the combination and the sensor film are laminated together in a continuous process from roll to roll, and

wherein at least the metallic electrode film comprises repeated electrode patterning.--.

2. The following is an examiner's statement of reasons for allowance: The prior art of record fails to disclose the claimed invention. The closest reference, Good et al., teaches a diagram of an in-line press used to print and assemble the display cells as shown in FIG. 9. Good et al. teach that a dielectric layer is applied in a succession of patterns to the metal film, followed by a patterned carbon electrode layer, and a die cut station divided the successively patterned portions into individual display cells that can be stacked, rolled, or further processed. However, Good et al. fail to teach a process of forming the pattern on the metallic surface such that the electrode is created by printing a dielectric pattern corresponding to the electrode onto a surface of a metal on a surface of the dielectric film in a continuous process from roll to roll and removing the metal from the areas outside the pattern by etching in a continuous process from roll to roll and laminating the dielectric film and patterned metallic electrode film together in a continuous process from roll to roll as recited in the claimed invention. In addition, Good et al. also fail to teach that at least metallic electrode film includes repeated electrode patterning. It is not obvious taken alone or in combination of other references fairly to suggest the claimed invention.

Art Unit: 3729

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Claims 8-15 and 32 are allowed.
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D. Kim whose telephone number is 571-272-4565. The examiner can normally be reached on Monday-Friday between 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

pdk



**David P. Bryant**  
Primary Examiner